GP301703

# TORQUE BASED CYLINDER DEACTIVATION WITH VACUUM CORRECTION

## ABSTRACT OF THE DISCLOSURE

An engine control system controls transitions between activated and deactivated modes in a displacement on demand engine. The engine control system includes an engine speed sensor that generates an engine speed signal and a controller that calculates a torque reserve of the engine based on the engine speed signal. The controller transitions the engine from the activated mode to the deactivated mode when the torque reserve is greater than a threshold torque. The controller transitions the engine from the deactivated mode to the activated mode when the torque reserve is lower than the threshold torque.